

Figure 1:Torque Performance (4000WOT,CR=13)

Iso-C8 (100RON / 100MON) → Fuel "HO" (103RON / 93MON)

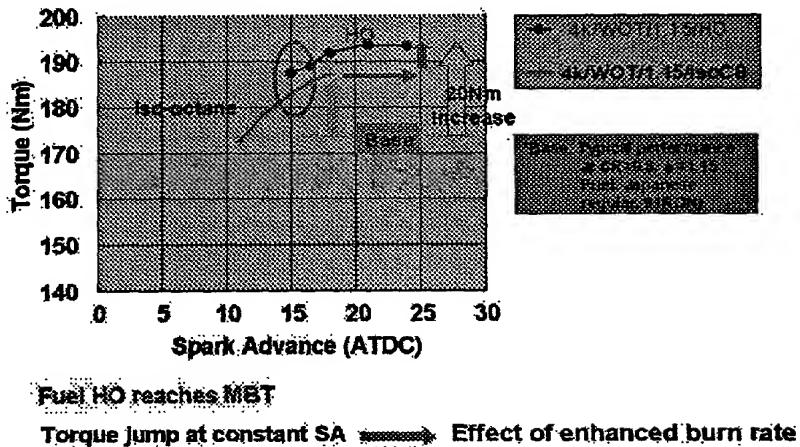


Figure 2: Efficiency (4000WOT, CR=13)

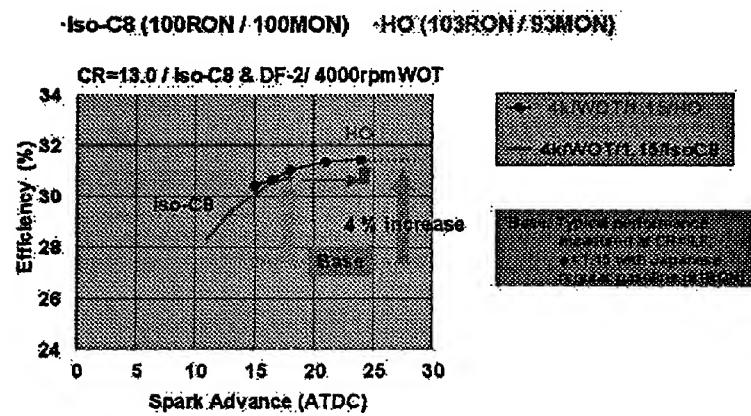


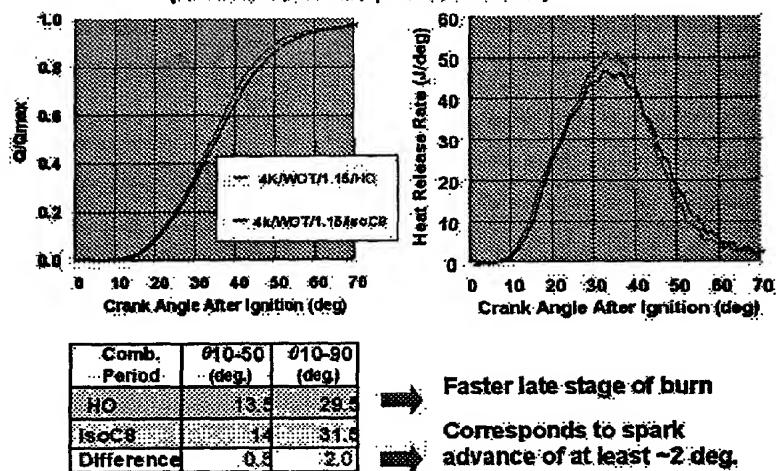
Figure 3: Burn Rate and Heat Release Rate(4000WOT, CR=13, $\phi=1.15$, SA=16.5)

FIGURE 4
1200 rpm, 12mm3/st: Inj. Timing Dependence - Torque -
Spark Timing: 23 deg BTDC

- LFG-2B/213/φ0.52
- DF-1813/φ0.52
- LFG-2B/29.8/φ0.52/TMC Data

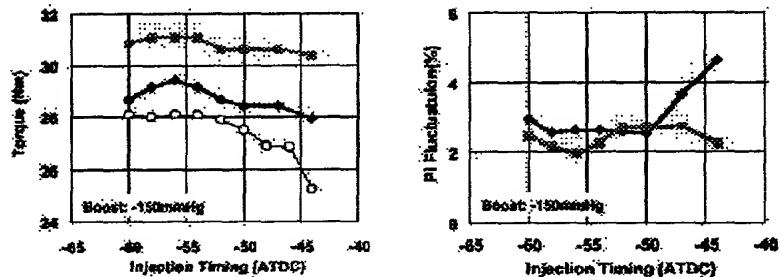
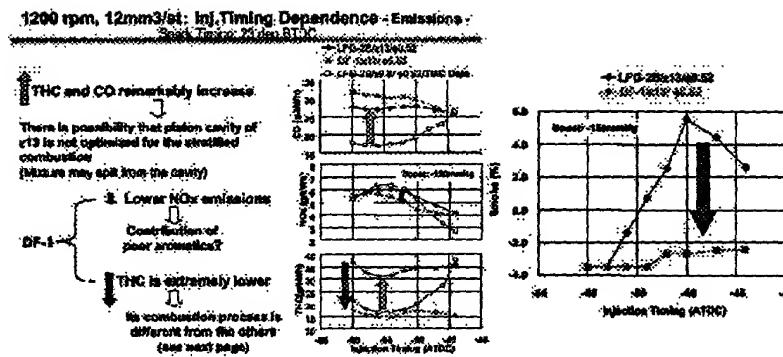


FIGURE 5



UNIVERSITY OF TORONTO LIBRARY

FIGURE 6

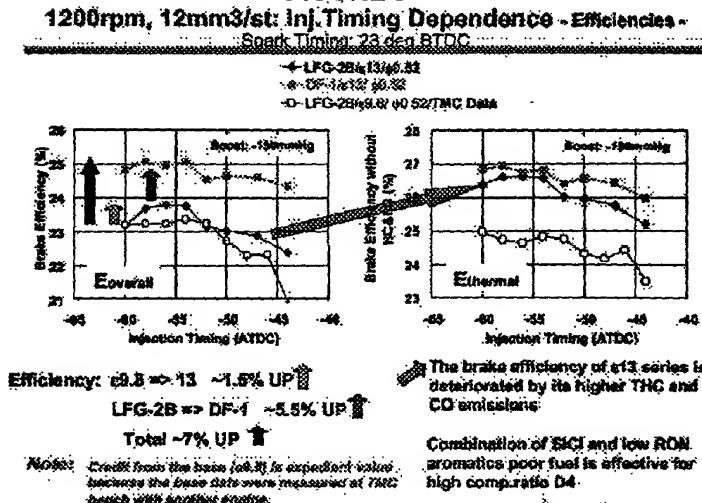
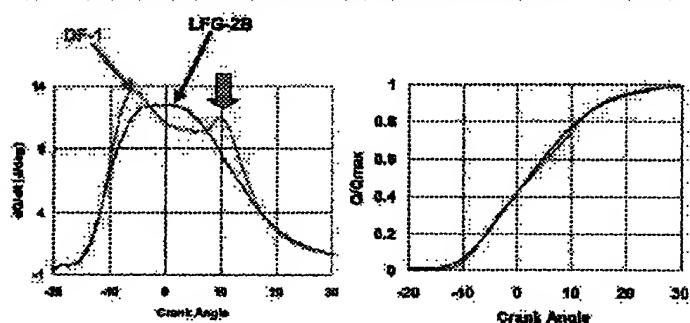


FIGURE 7

1200 rpm, 12mm3/st: Heat release patterns:
Spark Timing: 23 deg BTDC, Inj. Timing: 54 deg BTDC



↓ In the case of DF-1 with e13, SICI (Spark Induced Compression Ignition) is occurred.

FIGURE 8

3000 rpm, 16mm3/st: Inj. Timing Dependence - Emissions -

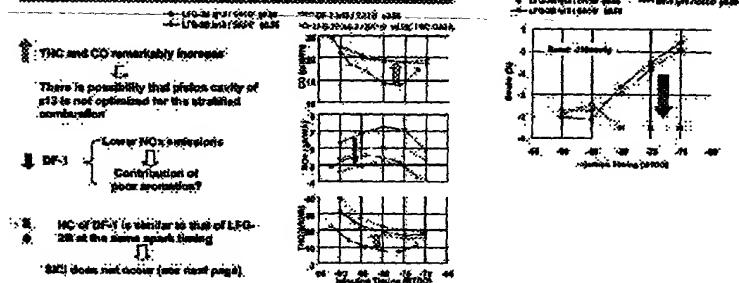


FIGURE 9

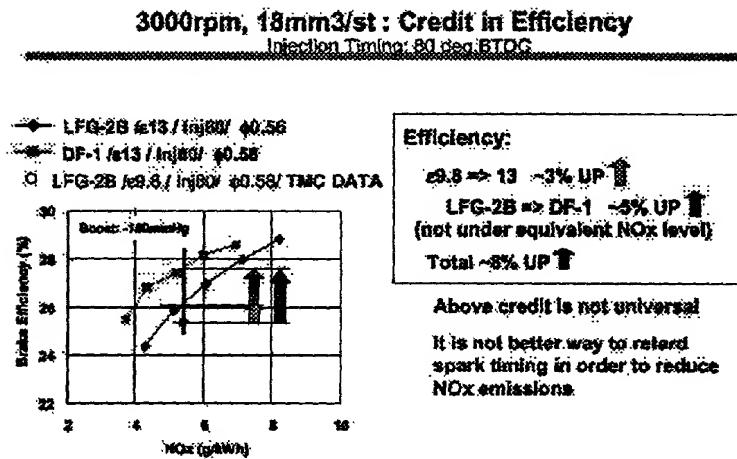


FIGURE 10

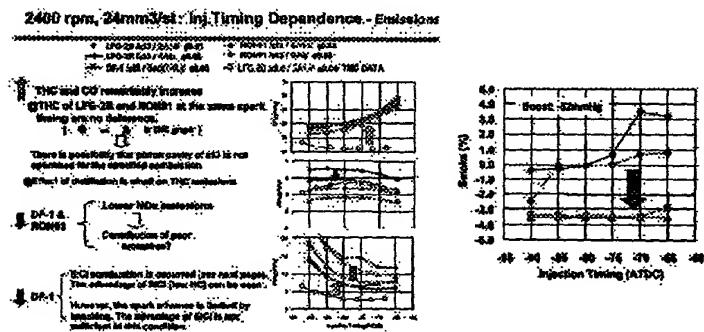
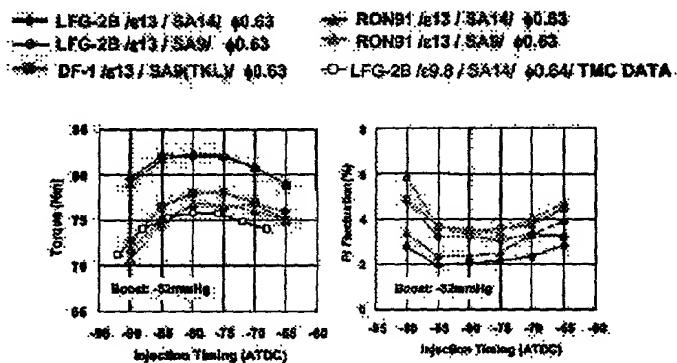


FIGURE 11

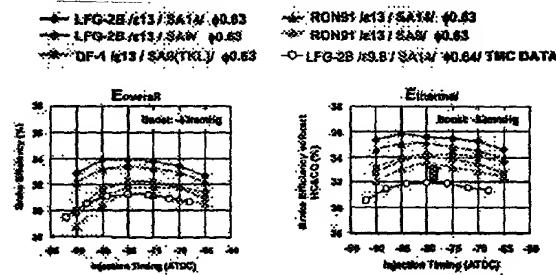
2400 rpm, 24mm3/st: Inj. Timing Dependence - Torque -
Equivalent Boost and Φ



e13 series shows higher torque.

FIGURE 12

2400 rpm, 24mm3/st: Inj. Timing Dependence - Efficiency -



Credit in efficiency will be
discussed on later page.

The brake efficiency of e13 series is
deteriorated by its higher THC and
CO emissions.

FIGURE 13

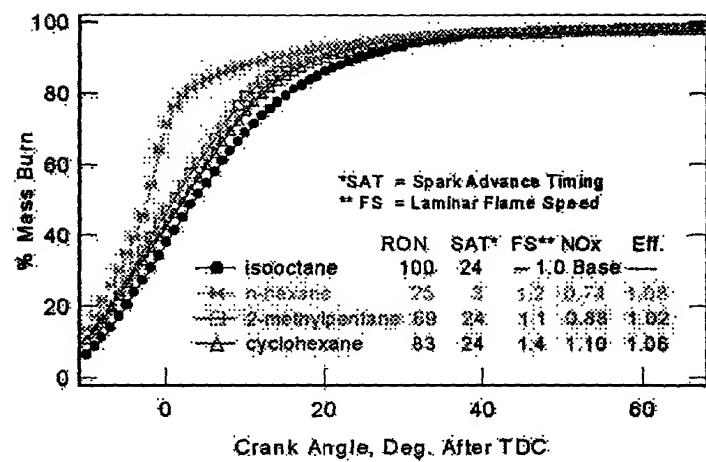


FIGURE 14

